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## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

- (Currently Amended) A MEMS package, comprising:
   a substrate with a MEMS structure fabricated on a surface of the substrate;
   a cover plate bonded to the surface of the substrate by a bond ring;
   an inner cavity defined by the substrate, the cover plate and the bond ring;
   a fill port defined by the substrate, the cover plate and a breach in the bond ring;
- <u>and</u>

a volume of liquid sealed within the inner cavity.

- 2. Cancelled.
- 3. (Currently Amended) The MEMS package of Claim 1 2, further comprising: a seal disposed in the fill port.
- 4. (Original) The MEMS package of Claim 1, wherein the bond ring comprises at least one of a glass frit, adhesive, eutectic solder, solder mask material, anodic bond, covalent bond, laser weld or Sol-gel material.
- 5. (Original) The MEMS package of Claim 3, wherein the seal comprises at least one of an adhesive, organic adhesive, epoxy, solder or glass-based sealant.
- 6. (Original) The MEMS package of Claim 3, wherein the seal comprises a curable adhesive.

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- (Original) The MEMS package of Claim 1, further comprising:
   bond pads for making electrical connections to the MEMS package arranged in an exposed portion of the substrate.
- 8. (Currently Amended) A MEMS package adapted for use in a range of operating temperatures comprising:
  a substrate with MEMS circuitry fabricated on a surface of the substrate;
  a cover plate bonded to the surface of the substrate by a bond ring;
  a fill port defined by the substrate, the cover plate and a breach in the bond ring;
  an inner cavity defined by the substrate, the cover plate and the bond ring; and
  a liquid fluid sealed within the inner cavity, the liquid fluid having a coefficient of
  thermal expansion, wherein the inner cavity has a volume which is small enough so that
  expansion of the liquid fluid throughout the range of operating temperatures is
  - 9. (Original) The MEMS package of Claim 8, further comprising: a seal disposed in the fill port.

accommodated by deflections of at least the cover plate, substrate and bond ring.

- 10. (Original) The MEMS package of Claim 8, wherein the bond ring comprises one of a glass frit, adhesive, eutectic solder, solder mask material, anodic bond, covalent bond, laser weld or Sol-gel material.
- 11. (Original) The MEMS package of Claim 9, wherein the seal comprises at least one of an adhesive, organic adhesive, epoxy, solder or glass-based sealant.
- 12. (Original) The MEMS package of Claim 9, wherein the seal comprises a curable adhesive.
- 13. (Original) The MEMS package of Claim 8, further comprising:

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bond pads arranged in an exposed portion of the surface of the substrate.

14. (Withdrawn) A MEMS assembly comprising:

a substrate with a plurality of MEMS structures fabricated at a plurality of respective die locations on a surface of the substrate;

a cover plate bonded to the surface of the substrate by a plurality of bond rings; a plurality of inner cavities associated with respective die locations, each being defined by the substrate, the cover plate and one of the plurality of bond rings; and

a plurality of fill ports, each being defined by the substrate, the cover plate and a breach in the one of the plurality of bond rings.

- 15. (Withdrawn) The MEMS assembly of Claim 14, wherein the cover plate comprises a plurality of openings defining a plurality of exposed portions on the substrate.
- 16. (Withdrawn) The MEMS assembly of Claim 15, wherein:

a first group of openings define a first group of exposed portions, each of the first group of exposed portions being adjacent a fill port; and

a second group of openings define a second group of exposed portions on the substrate.

- 17. (Withdrawn) The MEMS assembly of Claim 16, wherein the second group of openings comprise slots.
- 18. (Withdrawn) The MEMS assembly of Claim 16, further comprising: a plurality of bond pads on the surface of the substrate arranged in the second group of exposed portions.
  - 19. (Withdrawn) The MEMS assembly of Claim 14, wherein the bond ring comprises one of a glass frit, adhesive, eutectic solder, solder mask material, anodic bond, covalent bond, laser weld or Sol-gel material.

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- 20. (Withdrawn) A MEMS assembly comprising:
- a substrate with a plurality of MEMS structures fabricated at a plurality of respective die locations on a surface of the substrate;
- a plurality of cover plates and a plurality of bond rings, each plate being bonded to the substrate by at least one of the bond rings;
- a plurality of inner cavities associated with respective die locations, each being defined by the substrate, a respective cover plate and a respective bond ring; and
- a plurality of fill ports, each being defined by the substrate, the respective cover plate and a breach in the respective bond ring.
  - 21. (Withdrawn) The MEMS assembly of Claim 20 further comprising: bond pads arranged in exposed portions on the substrate.
  - 22. (Withdrawn) The MEMS assembly of Claim 14, wherein the bond rings comprise one of a glass frit, adhesive, eutectic solder, solder mask material, anodic bond, covalent bond, laser weld or Sol-gel material.
- 23. (Withdrawn) A MEMS package comprising: a substrate with a MEMS structure fabricated on a surface of the substrate; a cover plate bonded to the surface of the substrate by a bond ring; an inner cavity defined by the substrate, the cover plate and the bond ring; and a fill port defined by the substrate, the cover plate and a breach in the bond ring, wherein the MEMS assembly was singulated from an assembly comprising a plurality of inner cavities.
  - 24. (Withdrawn) The MEMS package of Claim 23, further comprising: fluid sealed within the inner cavity.

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25. (Withdrawn) The MEMS package of Claim 24, wherein the inner cavity was filled with the fluid prior to singulating the MEMS assembly from the assembly comprising a plurality of inner cavities.

## 26-47. Cancelled

48. (Currently Amended) A spatial light modulator, comprising: a substrate with a MEMS mirror array fabricated on a surface of the substrate; a cover plate bonded to the surface of the substrate by a bond ring; an inner cavity defined by the substrate, the cover plate and the bond ring; and a fill port defined by the substrate, the cover plate and a breach in the bond ring;

<u>and</u>

a liquid sealed within the inner cavity.

- 49. Cancelled.
- 50. (Currently Amended) The spatial light modulator of Claim <u>48</u> 49, further comprising: a seal disposed in the fill port.
- 51. (Original) The spatial light modulator of Claim 48, wherein the bond ring comprises at least one of a glass frit, adhesive, eutectic solder, solder mask material, anodic bond, covalent bond, laser weld or Sol-gel material.
- 52. (Original) The spatial light modulator of Claim 50, wherein the seal comprises at least one of an adhesive, organic adhesive, epoxy, solder or glass-based sealant,
- 53. Cancelled.
- 54. (New) The MEMS package according to claim 1,

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wherein the bond ring comprises at least one of a glass frit, adhesive, eutectic solder, anodic bond, covalent bond, laser weld or Sol-gel material.

- 55. (New) The MEMS package according to claim 1, wherein the seal comprises at least one of an adhesive, organic adhesive, epoxy, or glass-based sealant.
- 56. (New) The MEMS package according to claim 8, wherein the bond ring comprises one of a glass frit, adhesive, eutectic solder, anodic bond, covalent bond, laser weld or Sol-gel material.
- 57. (New) The MEMS package according to claim 8, wherein the seal comprises at least one of an adhesive, organic adhesive, epoxy, or glass-based sealant.